

Amendments to the Claims:

1 to 11 (canceled).

12 (new). A method for checking for line faults in a bus system having at least two bus subscribers connected to a data bus for data communication between the subscribers, the data bus having at least two bus lines, which comprises:

configuring the bus subscribers to be able to assume a recessive state and a dominant state;

making available an internal high potential and an internal low potential in the bus subscribers;

carrying out a check for a line fault by a bus subscriber in the dominant state; and

carrying out a check for line faults by comparison of voltage levels on the bus lines with threshold values related to one of an internal high level and an internal low level of the bus subscriber.

13 (new). The method according to claim 12, which further comprises:

providing a supply voltage related to an internal reference ground potential in the bus subscribers, the threshold values being greater than the supply voltage; and

identifying a fault when one of the voltage levels on the bus lines is greater than the respective threshold value.

14 (new). The method according to claim 13, which further comprises identifying a fault when one of the voltage levels on the bus lines is greater than the respective threshold value during a predetermined number of successive dominant states of the bus subscriber carrying out the fault identification.

15 (new). The method according to claim 12, which further comprises:

comparing the voltage levels on the data lines with one another for detection of transmitted data; and

upon detection of a fault on one of the data lines, carrying out detection of transmitted data by comparing the voltage level on the other one of the data lines with a threshold value related to one of the internal high potential and the internal low potential.

16 (new). The method according to claim 13, which further comprises:

comparing the voltage levels on the data lines with one another for detection of transmitted data; and

upon detection of a fault on one of the data lines, carrying out detection of transmitted data by comparing the voltage level on the other one of the data lines with a threshold value related to one of the internal high potential and the internal low potential.

17 (new). The method according to claim 14, which further comprises:

comparing the voltage levels on the data lines with one another for detection of transmitted data; and

upon detection of a fault on one of the data lines, carrying out detection of transmitted data by comparing the voltage level on the other one of the data lines with a threshold value related to one of the internal high potential and the internal low potential.

18 (new). A bus system, comprising:

a data bus having at least two bus lines; and

at least two bus subscribers coupled to said data bus for
serial data transfer of binary data between said bus
subscribers, at least one of said bus subscribers having:

at least one control unit;

at least one transceiver for at least one of transmission
and reception of data signals; and

at least one fault identification device carrying out the
method according to claim 12.

19 (new). The bus system according to claim 18, further
comprising at least one fault detection device comparing at
least one voltage level on one of said bus lines with a
threshold value related to one of the internal low level and
the internal high level and providing a fault signal.

20 (new). The bus system according to claim 19, wherein said
at least one fault detection device is:

a first fault detection device comparing a voltage level on one of said data lines with a first threshold value and provision a first fault signal; and

a second fault detection device comparing a voltage level on the other one of said data lines with a second threshold value and providing a second fault signal.

21 (new). The bus system according to claim 20, further comprising a first data detection device for detection of transmitted data, said first data detection device comparing voltage levels on said bus lines and providing a first data signal.

22 (new). The bus system according to claim 21, further comprising:

at least one second data detection device for detection of transmitted data, said second data detection device comparing a voltage level on at least one of said data lines with at least one threshold value related to the internal low level to provide at least one second data signal; and

a switch switching between said first data signal and said at least one second data signal as a function of said at least one fault signal.

23 (new). The bus system according to claim 18, wherein said data bus serially transmits binary data by duplex signals and is in the form of a differential, two-wire data bus having two bus lines twisted with one another.

24 (new). The bus system according to claim 18, wherein the bus system is a CAN bus system.

25 (new). The bus system according to claim 18, further comprising at least one means for detecting a fault, said fault detecting means comparing at least one voltage level on one of said bus lines with a threshold value related to one of the internal low level and the internal high level and providing a fault signal.

26 (new). The bus system according to claim 25, wherein said at least one fault detection device is:

a first means for detection a fault, said first fault detecting means comparing a voltage level on one of said data

lines with a first threshold value and provision a first fault signal; and

a second for detection a fault, said second fault detecting means comparing a voltage level on the other one of said data lines with a second threshold value and providing a second fault signal.

27 (new). The bus system according to claim 26, further comprising a first means for detecting transmitted data, said first data detection means comparing voltage levels on said bus lines and providing a first data signal.

28 (new). The bus system according to claim 27, further comprising:

at least one second means for detecting data comparing a voltage level on at least one of said data lines with at least one threshold value related to the internal low level to provide at least one second data signal; and

a means for switching between said first data signal and said at least one second data signal as a function of said at least one fault signal.

29 (new). In a bus system having a data bus with at least two bus lines and at least two bus subscribers coupled to the data bus for serial data transfer of binary data between the bus subscribers, a fault detecting bus subscriber comprising:

at least one control unit;

at least one transceiver for at least one of transmission and reception of data signals; and

at least one fault identification device carrying out the method according to claim 12.

30 (new). A bus system, comprising:

a data bus having at least two bus lines; and

at least two bus subscribers coupled to said data bus for serial data transfer of binary data between said bus subscribers, at least one of said bus subscribers configured to assume a recessive state and a dominant state and having:

internal high and low potentials;

internal high and low levels;

at least one control unit;

at least one transceiver for at least one of transmission and reception of data signals, said transceiver connected to said control unit; and

at least one fault identification device connected to at least said transceiver and carrying out:

a check for a line fault when a bus subscriber is in said dominant state; and

a check for line faults by comparing voltage levels on said bus lines with threshold values related to one of said internal high level and said internal low level.